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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,341	03/02/2005	Chan Hyuk Chyun	MU05001USU	8950

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THE ECLIPSE GROUP
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EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT	PAPER NUMBER
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2612

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/526,341	Applicant(s) CHYUN, CHAN HYUK	
	Examiner Julie Lieu	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17, 18, 20-27, 29-34 and 37-42 is/are rejected.
- 7) ☒ Claim(s) 16, 19, 28, 35 and 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152..

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/6/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to Applicant's amendment filed March 02, 2005.

Claims 1-37 have been amended. New claims 38-42 have been added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-15, 17, 18, 22-26, 32, 34, 37, 39, and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Gardner, Jr. et al. (US 2003/0184442 A1).

Claim 1:

Gardner, Jr. et al. (Gardner, Jr.) discloses a remote monitoring system for exterminating vermin, comprising:

- a. at least one sensor 12, installed at a plurality of zones of a vermin control subject building, for sensing movement of the pest vermin in each zones [0034], and producing and transmitting sensed signals corresponding to the sensed movement;

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- b. at least one remote controller 16, installed at the vermin control subject building, for receiving and processing the sensed signals to transmit vermin-related information; and
- c. a central control apparatus 17 for receiving the vermin-related information from the at least one remote controller and processing the vermin-related information for each zone.

Claim 2:

The system in Gardner, Jr. further comprises at least one repeater 15, installed at the vermin control subject building, for receiving sensed signals and re-transmitting them to the said at least one remote controller.

Claim 3:

In Gardner, Jr., a transmission of the sensed signals between the at least one sensor and the at least one remote controller is performed by wireless communication. See front-page figure and para. [0035].

Claim 4:

In Gardner, Jr. a retransmission of the sensed signals between the at least one sensor and the at least one repeater is performed by wireless communication. See front page figure and para. [0035].

Claim 5:

In Gardner, Jr. a transmission of the sensed signals between sensor 12 and the at least one repeater is performed by wired communication, and a retransmission of the sensed signals

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between the at least one repeater and the at least one remote controller is performed by wireless communication. See para. [0035].

Claim 6:

The at least one sensor 12 in Gardner, Jr. comprises at least one out of a first sensor for sensing movement of cockroaches, a second sensor for sensing movement of rats, and a third sensor for sensing movement of flying insects. See summary of invention.

Claim 7:

Sensor 12 in Gardner is integrated with vermin control equipment 11 for capturing the vermin.

Claim 8:

Sensor 12 in Gardner is implemented by integrating a heat detector or a movement detector to one selected from a group consisting of an insect luring light, an automatic chemical dispenser, and a luring frame 11 for capturing rodents.

Claim 9:

The remote controller 16 further comprises:

- a. a receiving module 14 for receiving the sensed signals from sensor 12;
- b. a sensed information processing module represented by 16 for receiving and processing the sensed signals received from the receiving module and collecting vermin-related information; and
- c. a transmitting module (inherent in 16) for transmitting the vermin-related information to the central control apparatus 17.

Claim 10:

The remote controller 16 further comprises a data input module for receiving information related to an outbreak of the vermin from either or both of a user of the vermin control subject building and a vermin control manager, wherein the information is manually inputted by either or both of the user and the vermin control manager. Para. [0032].

Claim 11:

In Gardner's system, a remote controller 16 further comprises a memory for storing vermin-related information until the transmission of the vermin-related information. The reference fails to clearly disclose a transmission time determining module to determine whether to transmit the information immediately. Nonetheless, the reference suggests that the data can be prompted by polling transaction or data can be accumulated then passed as a block of information. See para. [0036]. Also, in para. [0037], it is suggested that data be passed as individual event data or as histograms of the number of events within different time windows. Therefore, it is implicitly disclosed in the reference that a time module is used to determine whether the information should be passed immediately or not.

Claim 12:

The central control apparatus 17 further comprises:

- a. a vermin-related information managing module 26 for storing and updating the vermin-related information received from the remote controller, thereby managing the vermin-related information;
- b. a database 25 for storing the vermin-related information, which is managed by the vermin-related information managing module; and

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- c. a communication module (inherent) for performing wire/wireless communications.

Claim 13:

The central control apparatus 17 further comprises a report producing module for producing a report with respect to the vermin-related information. See table I on page 4.

Claim 14:

Sensor 12 produces the sensed signals in response to sensing of the vermin and the sensed signals are transmitted together with an identification signal of each sensor. See para. [0041].

Claim 15:

The remote controller 16 transmits the information to the central control apparatus 17 through a public switched telephone network. Para. [0035].

Claim 17:

The remote controller 16 further inherently comprises:

- a. a vermin-related information analyzing module for analyzing the vermin-related information received from the sensed information processing module;
- b. a vermin-related information managing module for storing in the memory at least part of the vermin-related information and the analysis result of the vermin-related information analyzed by the vermin-related information analyzing module and updating the stored information, thereby managing the information; and
- c. a terminal connecting module for transmitting the analysis result of the pest related vermin related information from the memory to the a mobile communication

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terminal, when the mobile communication terminal is connected to the terminal connecting module.

Claim 18:

The mobile communication unit in Gardner, Jr. is a PDA. See [0035-0036].

Claims 22 and 24:

The rejection of claims 22 and 24 recites the rejection of claims 1 and 11 in combination, except claim 22 is a method claim.

Claim 23:

Gardner discloses the step of producing a report using the analyzed vermin-related information.

Claims 25 and 26:

It is inherent that the sectioning step in Gardner includes sectioning the vermin control subject building into zones on the basis of a function of each zone and the zones are the minimum unit on which a vermin control work is to be performed.

Claim 29:

In Gardner, Jr.'s method the pest related vermin-related information is transmitted at a predetermined time.

Claim 32:

The step of transmitting in Gardner's includes transmitting the vermin-related information to at least one vermin control manager 17 by wireless communication.

Claims 34 and 37:

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Gardner, Jr. further discloses the step of transmitting collected and analyzed vermin-related information to a mobile communication terminal belonging to a vermin control manager.

Claim 39:

The rejection of claim 39 recites the rejection of claim 11, except it is a method claim.

Claim 41:

The mobile communication unit in Gardner, Jr. is a PDA. See [0035-0036].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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5. Claims 21, 27, 30, 31, 33, 38, 40, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner, Jr. et al. (US 2003/0184442 A1).

Claim 20:

The reference fails to disclose what information is to be transmitted immediately and what information is to be transmitted at a predetermined time. However, this is only a matter of choice in design. It is only up to the system implementer to determine what is considered to be dangerous and should be reported immediately.

Claim 21:

Gardner, Jr. fails to disclose periodically checking a status including a breakdown. However, the reference implicitly suggests that as it suggests that battery condition is checked. Therefore, it would have been obvious to one skilled in the art to modify the Gardner system for any fault, failure, breakdown or any condition that could lead to system breakdown such as low battery condition as suggested in the reference itself.

Claim 27:

Though not discussed in details in Gardner, Jr., it would have been obvious to one skilled in the art to section the building in whichever desired including the way as claimed.

Claim 30:

The rejection of claim 30 recites the rejection of claim 20, except it is a method claim.

Claims 31 and 42:

The time when the information is to be transmitted, such as at night, would only constitute a design choice, not an inventive step.

Claim 38:

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Though not clearly stated in the reference, one skilled in the art would have readily recognizing to determine the vermin appearing and captured according to the locations, time period, and the type of vermin because it is desirable to get this analysis to determine which section of the building should be treated for what types of the detected vermin.

Claim 33:

The rejection of claim 33 recites that rejection of claim 38, except it is a method claim.

Claim 40:

The rejection of claim 40 recites the rejection of claim 21, except it is a method claim.

Allowable Subject Matter

6. Claims 16, 19, 28, 35, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Farrell et al., US Patent No. 6,445,301.

Beroza et al., US Patent No. 7,020,996.

Barber et al., US 2001/0054962.

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Mafra-Neto et al., US 2003/0069697.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long, sweeping horizontal stroke extending to the right.

Julie Lieu
Primary Examiner
Art Unit 2612

Dec 22, 06